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Prospects for the Development of Computerized Training Disabled Children (with HIA) on the Basis of Personal-Activity Approach

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Abstract

There is an analyses of problems caused by a prospect of computer-based education development on a basis of personal-activity approach of children with disabilities in the article. A correlation between general and computer competence is shown. The more exactly defined concept of disability children’s computer competence is presented.

Keywords: the personal-activity approach, competency, competence, computer competence, computer addiction, computer-based training of disability children

The reforms of modern school which have been carried out for the recent decades with the aim of raising the efficiency do not adequately consider the importance of computer technologies with the disabled children. Computer technologies are efficient only when they are combined with the appropriate educational technologies. The previous categories (socialization, educational system, learning process, teaching activities, teachers’ cooperation, teachers’ mission, educational technology) are still in effect, but the problem of mastering computer technologies by the disabled children is still urgent. The analysis shows that new computer technologies significantly extend the educational potential which can dramatically change the arrangement of teaching and learning activities for the disabled children in senior classes.

The analysis of computerized training, based on the personal-activity approach, reveals the shortcomings of developing computer competence of high school students with HIA:

– poorly developed methods of introducing new computer technologies in the learning process of the children with HIA,
– insufficient study of psychological and pedagogical problems of computerized training of the children with HIA,
– insufficient training of the teaching staff,
– lack of specialists in the field of computer technologies.

The problem of transition to some new qualitative parameters in the system of developing a computer competence of high school students with HIA, teachers and parents can be solved in case modern specialized schools are equipped with computers and the learning environment for developing a computer competence is preliminary studied; the learning process at specialized schools being based on the personal-activity approach.

The concept of competence can be considered as (Хуторской, 2003):
– terms of reference of some body or official,
– range of questions, where the official is competent and experienced, i.e. has abilities.

Competence is considered as some alienated and specified requirement for student training. As for competency, it is a real personal quality, i.e. the characteristic of a high school student, in our case it is a student with HIA.

Thus, competency is a realized competence of a high school student. “Competency may comprise a number of competences which are shown in various activities” (Хуторской, 2003, p. 59).

Competency is a characteristic of a senior student with HIA, and competence is something which he knows, which he can and is able to do. Everything which is known by the student defines him as a competent student.

The authors of the project “Definition and Selection of Competences” define a competence as the ability to meet the requirements or to successfully fulfill the task and to have both cognitive and non-cognitive components (Собкин, Адамчук, Руднев).

Competence can be considered as the ability to successfully meet individual and social demands or perform the tasks which meet individual and social requirements. “Competence is a readiness of the individual to efficiently arrange internal and external resources for setting and achieving the goal” – says Selevko, Doctor of Education (Приоритетный национальный…).

The development of computer competency by high school students with HIA implies the increase of the requirements for the mass computer literacy of teachers, parents, scientific and technical personnel.

There can be distinguished three types of computer literacy:
– domestic computer literacy,
– professional computer literacy,
– obtaining the knowledge of computer as an intellectual means of learning.

The listed types of computer literacy are not mutually exclusive; they are interrelated and partially overlap. Computer literacy comprises motivational, cognitive, emotional, behavioral, aesthetic components. The efficient use of a computer depends to a great extent on the features of self-regulation, motiva-
tional sphere, the personality of a high school student with HIA and on the maturity of computer competency.

Computer competency is a broader concept which includes, among others, computer literacy. Computer literacy differs from computer competency as it implies not automaticity but the search for a prompt and effective decision of the given task in some definite situation.

Information and technological competency is, above all, a complex characteristic of a person with the account of his intellectual cognitive and technological activities.

We also suppose that along with the development of information and technological competency it is necessary to ponder the issues of the computer addiction prevention; this problem having been profoundly and timely considered by Fortova and Zavrazhin (2009, p. 43) in their paper “Computer game addiction: yesterday, today, tomorrow”. The authors of the study advise the teachers and parents to differentiate and control the time which is spent by senior school children in front of computers. It should be done in order to prevent virtual reality from becoming a prevailing thing in everyday life of teenagers.

In 1989 Shotton was the first to apply the term “addiction” to the interrelation between a man and a computer. In the mid-90s of XX century Brenner, Griffite, Davis, Yurieva began considering the addiction as a serious problem. Most of papers (Voiskunsky, Goldberg, Young and others) are devoted to the problem of Internet-addiction. Meanwhile, the problem of computer game addiction is not paid much attention to in spite of its great importance in the contemporary world. This is especially true for the high school students with HIA.

On the basis of the above information we can suggest a more exact concept of computer competency concerning high school students with HIA. By this competency we understand the children’s complex characteristic and their intellectual and cognitive activity which define the degree of the students’ immersion in the work with computers on the basis of personal-activity approach. This approach enables the children to navigate the information space in class and out of class, to assess the situation logically and objectively, to demonstrate reasonable behavior, emotional stability leveling computer addiction and strengthening social immunity (Еропов, 2015, р. 50).

**Literature**
